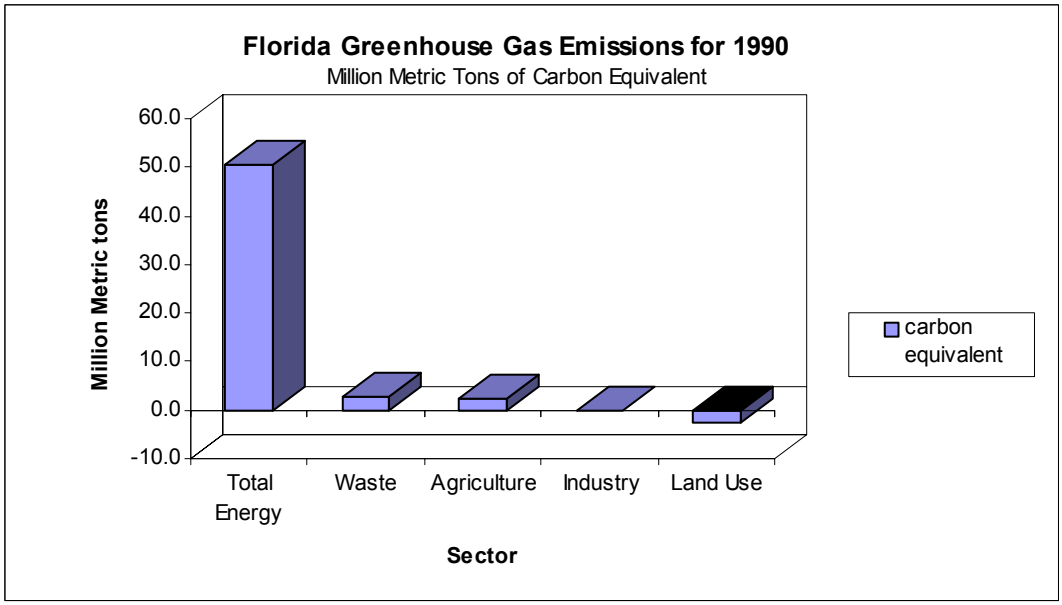
FLORIDA GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report *"Inventory of Florida Greenhouse Gas Emissions and Sinks: 1990-1997"* provides a streamlined inventory of greenhouse gas emissions and sinks for Florida for each year from 1990 through 1997.

The streamlined approach used to develop Florida's inventory includes (1) emissions from "key" sources and sinks chosen because they account for a large fraction of total national emissions and (2) emissions from additional sources, chosen because of their anticipated importance in the state and/or the feasibility of developing estimates due to readily available activity data. Key sources included in streamlined greenhouse gas inventories include: carbon dioxide emissions from fossil fuel combustion; methane from landfills; carbon fluxes from land-use change and forestry; methane emissions from enteric fermentation; methane and nitrous oxide emissions from manure management; and nitrous oxide emissions from agricultural soils. These sources typically represent nearly 90 percent of states' total greenhouse gas emissions.[1] The streamlined greenhouse gas inventory for Florida also includes estimates of emissions of high global warming potential gases from the use of substitutes for ozone depleting substances. All of these sources are expected to account for more than 90 percent of Florida's greenhouse gas emissions.

Emissions for each source were estimated using methods from the 1999 ***Emission Inventory Improvement Program, Volume VIII: Estimating Greenhouse Gas Emissions***. According to these estimates, Florida's greenhouse gas emissions increased from 53.4 million metric tons of carbon equivalent (MMTCE) in 1990 to 61.0 MMTCE in 1997.

[1] Because these key sources do not account for total state emissions, the Florida Inventory should not be directly compared to other state inventories.

Florida Greenhouse Gas Emissions for 1990

BY SECTOR	CO_2 (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	HFCs, PFCs, and SF_6 (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	0.6	*	*	*	0.6
Energy - Commercial	1.5	*	*	*	1.5
Energy - Industrial	3.3	*	*	*	3.3
Energy - Transport	22.1	*	*	*	22.1
Energy - Utility	23.3	*	*	*	23.3
Energy - Exported Electricity	*	*	*	*	0.0
Energy - Other	*	*	*	*	0.0
Total Energy	**50.7**	*	*	*	**50.7**
Waste	*	**2.7**	*	*	**2.7**
Agriculture	*	**0.9**	**1.6**	*	**2.5**
Industry	*	*	*	**0.0**	**0.0**
Land Use	**-2.5**	*	*	*	**-2.5**
Total	**48.1**	**3.6**	**1.6**	**0.0**	**53.4**

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the energy – other figures, and emissions from biofuel combustion are excluded.

The principal greenhouse gas was carbon dioxide, comprising 176 million metric tons (48.1 MMTCE) in 1990. Other emissions in 1990 included methane with 0.63 million metric tons (3.6 MMTCE), 0.02 metric tons of nitrous oxide (1.6 MMTCE), and 0.01 MMTCE of HFCs and PFCs.

The only source of carbon dioxide emissions evaluated in the inventory was fossil fuel combustion. Carbon dioxide sinks (i.e., an increase in forest carbon storage) offset about 5% of the total carbon dioxide emissions. Sources of methane emissions were landfills (75%), domesticated animals (19%), and manure management (6%). Nitrous oxide emissions were attributable to agricultural soil management (81%) and manure management (19%). Emissions of HFCs, PFCs, and SF_6 were due to the use of substitutes for ozone depleting substances.

Florida emissions in 1990 were 4.1 MTCE per capita, compared to 1990 U.S. emissions of 4.9 MTCE per capita for the same key sources.